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NOTEWORTHY COLLECTION

ARIZONA

ROSA STELLATA Wooton subsp. *ABYSSA* A.M. Phillips (ROSACEAE). — Mohave County, Grand Canyon National Park, Cave Canyon (Vulture Canyon), north/northwest-facing section of the canyon, in a roughly 100-meter stretch along the canyon bottom edge extending upwards to base of a cliff face, UTM 12+ 234787E, 3991460N (NAD83) (36.031576°, -113.9434°), with *Atriplex canescens* (Pursh) Nutt., *Bromus rubens* L., *B. tectorum* L., *Ephedra viridis* Coville, *Fallugia paradoxa* (D. Don) Endl. ex Torr., *Ptelea trifoliata* L., and *Rhus aromatica* Aiton var. *trilobata* (Nutt.) A. Gray ex S. Wats., 1,258 m, growing on Kaibab Limestone, about 100 plants present, 25 April 2014, *T. Embrey 170* (GCNP, ARIZ) (NGS Map 2009).

Previous knowledge. Rosa stellata subsp. *abyssa* (Grand Canyon rose) occurs in the Grand Canyon region of northern Arizona. Although first described from Twin Point on the Shivwits Plateau, all other known locations occur to the east of there, including locations from the Little Colorado River Gorge and several locations along the Marble Canyon rim. On the south side of the Grand Canyon, *R. stellata* subsp. *abyssa* is only known from Cataract Canyon, Havasupai Point, and Eremita Mesa; this last locality has not been relocated (Brian 2000, SEINet 2014). Locations from the north rim of the Grand Canyon include the type locality, Fishtail Mesa, 150-Mile Canyon, and several localities along Kanab Canyon.

Significance. Cave Canyon (on the south side of the Colorado River) is the last major canyon in the Grand Canyon and directly adjacent to the Grand Wash Cliffs, which mark the end of the Colorado Plateau and the beginning of the Basin and Range region. The type locality (on the north side) is approximately 58 km to the northeast of this new locality, while the nearest known location on the south side of the river (near the head of Cataract Canyon) is approximately 205 km to the east. *Rosa stellata* subsp. *abyssa* is now known from locations that span the entire Grand Canyon region.

Since *R. stellata* subsp. *abyssa* was described in 1992, several new localities have been discovered, including some of the previously mentioned sites. I examined plants from these new localities to determine the presence or absence of stellately-arranged hairs at the base of the stipitate glands found along the stems, the stipitate glands being, along with the prickly hypanthium, diagnostic for this subspecies (Phillips 1992). The specimens examined, along with their respective localities, include the following: North Rim, overlooking 150-Mile Canyon [stellate hairs absent], *W. C. Hodgson 9821* (ASU0078894); Little Colorado River Gorge vicinity [stellate hairs absent], *D. Roth 1969* (ASU0078895); [stellate hairs absent] *D. Roth 2032* (ASC91662); [stellate hairs present] *D. Roth 2039* (ASC91669); Cataract Canyon (South Rim), [stellate hairs present] *G. Goodwin 1913* (ASC91670); [stellate hairs absent] *G. Goodwin 1551* [ASC86903]; Marble Canyon (eastern Grand Canyon) [stellate hairs present] *B. Hevron 1904* (ASU0078893); Cave Canyon (western Grand Canyon) [stellate hairs absent] *T. Embrey 170* (ARIZ421047).

Although not all extant *Rosa stellata* subsp. *abyssa* specimens were examined, these findings suggest that there is not a geographic correlation for the presence or absence of stellately-arranged pubescent hairs. In the Little Colorado Gorge area, plants collected roughly 2 km apart differed in the presence (*D. Roth 2039*) or absence (*D. Roth 2032*) of stellate hairs. Both Phillips and the current author examined more plants without stellate hairs than with stellate hairs; in his treatment, Phillips (1992) noted that plants from Kanab Creek and Eremita Mesa had less of these stellate hairs than plants from elsewhere in the Grand Canyon. Due to the variability of pubescence in the New Mexico and Texas plants (*Rosa stellata* subsp. *stellata*

Wooton and *Rosa stellata* subsp. *mirifica* (Greene) W. H. Lewis), Phillips did not reduce the plants beyond the one subspecies in Arizona (Phillips 1992). I agree with his conclusion.

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NOTEWORTHY COLLECTION

CALIFORNIA

DITTRICHIA VISCOSA (L.) Greuter (ASTERACEAE). — Solano County, McGary road, 38.198992°, -122.159644°, elev. 43 m., roadside, 5 September 2014, *Zoya Akulova-Barlow* (JEPS). More plants (about 30 total) were found southeast from McGary road, plants reproducing by seeds.

Previous knowledge. Dittrichia viscosa (sticky fleabane) has not been found in California previously. It was collected in the late 1800s as a ballast weed in Florida, New Jersey, and Pennsylvania, but did not become naturalized (Preston 2006).

Significance. This collection is the first report of *Dittrichia viscosa* in California. The species originated from the western Mediterranean region (Ball 1976; Brullo and deMarco 2000) and is potentially invasive; it has become naturalized in Western Australia (Wheeler et al. 2002) and Egypt (Boulos 2002). A closely related species, *Dittrichia graveolens* (L.) Greuter, has become an invasive weed in California (Rosatti 2012, California Invasive Plants Council 2015).

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